

## 5 UNAVOIDABLE ADVERSE EFFECTS

The implementation of the proposed project along any of the alternative routes would result in some unavoidable adverse effects identified below by topic. These would be reduced to localized minimal levels through implementation of standard mitigation practices.

### 5.1 AIR QUALITY

Vehicle and fugitive dust emissions would occur primarily during project construction and, to a lesser extent, ROW maintenance. Vehicle emissions from periodic access to the project site cannot be avoided. During winter construction, fugitive dust would be negligible.

Corona effects from the operation of the transmission line could result in the generation of a small amount of O<sub>3</sub>. Effects on ambient air quality would be short term and localized and would not exceed NAAQS.

### 5.2 LAND FEATURES

Minor modifications to the natural topography, drainage patterns, and slopes would be unavoidable. Construction of the transmission line would compact soils and damage the soil structure during excavation. The burying of soil and loss of soil productivity cannot be avoided by implementation of the proposed project. Increases in soil erosion could occur as a result of construction of the proposed project, temporary access roads, and installation of AC mitigation for the M&N gas pipeline. During the construction phase, localized erosion could increase above natural levels and soil would be deposited downslope. Standard mitigation practices would minimize erosion impacts during construction (Sections 2.4.1 and 2.4.2), and revegetation of construction sites and access roads would mitigate long-term impacts (Section 2.4.3).

Soil density would be affected (soil compaction) at construction areas and along some access roads, while soil structure would be disrupted in all excavation areas, including areas of installation of AC mitigation for the M&N gas pipeline. While mitigation measures would minimize soil erosion, some erosion is inevitable, especially during heavy rainfall events. Erosion impacts would be short term and would cease following revegetation of the exposed soils.

### 5.3 LAND USE

The transmission line would unavoidably change the nature of land use within the ROW. For example, commercial forestry operations could not occur within the ROW, while agricultural production could not occur within the immediate area of support structures.

## 5.4 HYDROLOGICAL RESOURCES

While the potential for adverse consequences to hydrologic resources is present, the standard mitigation practices outlined in the erosion and sedimentation control plan prepared for the NRI (BHE 2005) would minimize unavoidable adverse impacts. The mitigation practices are summarized in Sections 2.4.1 through 2.4.3. There would be a minor loss of floodplain area because of the placement of support structures (15 ft<sup>2</sup> [1.4 m<sup>2</sup>] per support structure pole). Nevertheless, the support structure poles would not impede floodwater movement or reduce floodwater-storage capacity.

## 5.5 ECOLOGICAL RESOURCES

Construction and maintenance of the transmission line ROW would cause temporary and permanent changes in plant communities. Vegetation immediately within construction footprints would be destroyed, and trees and other tall vegetation within the ROW would be removed (or topped), as necessary, to provide appropriate conductor clearance. Unavoidable adverse impacts on wildlife would include habitat loss, disturbance and/or displacement, mortality, and obstruction to movement. Increased noise could disrupt wildlife foraging and breeding cycles. Therefore, construction would be scheduled, as feasible, to avoid the reproductive seasons of sensitive wildlife species. The potential would exist for bald eagles and other birds to collide with shield wires or conductors, especially at major stream crossings or large wetland areas. However, bald eagle collisions have not been observed for the existing MEPCO 345-kV transmission line. To reduce the potential for such collisions, ball markers and/or flappers would be placed on the shield wires where the proposed line would cross rivers or streams known or likely to be frequented by bald eagles.

## 5.6 CULTURAL RESOURCES

Cultural resources could be adversely impacted by construction of the proposed project. Access to previously inaccessible areas could lead to vandalism of both known and undiscovered archaeological sites.

## 5.7 VISUAL RESOURCES

Because portions of each alternative route could be visible to some local residents, visitors, and people traveling on portions of public and private roads, the proposed project would have an adverse impact on certain viewsheds. This could alter the visual quality for some residents and the recreational experience of some visitors in the vicinity of the proposed project.

## **5.8 HEALTH AND SAFETY**

The construction and, to a lesser extent, operation and maintenance of the proposed project would increase noise levels near the ROW. Noise associated with corona effects would be audible only within the immediate area of the ROW. Noise impacts would be short term and localized and would not cause any significant impacts on human hearing.

The potential, albeit small, would exist for serious injuries or fatalities to workers during construction and maintenance of the NRI. These accidents would be a consequence of unanticipated events in the work environment, typical of all transmission corridor workplaces.

Operation of the NRI would add an additional source of public exposure to EMF. However, this additional EMF exposure would be limited (in terms of both the number of people that would be exposed and the duration of exposure of any individual). Therefore, EMF exposure from the proposed line would contribute only a small amount to the total EMF exposure that individuals receive throughout their lives. Where necessary, AC mitigation would be added to the M&N gas pipeline; thus, the potential for an adverse shock hazard from touching pipeline components would be negligible. The potential would exist for worker or public exposure to herbicides. However, with proper herbicide application, the health risk would be negligible. The potential, however slight, would exist for logging operators to contact energized conductors. The potential for adverse impacts on cardiac pacemakers would be negligible. Operation of the transmission line could cause some localized interference with radio reception (particularly in the AM broadcast band) as vehicles pass under the transmission line.